Netting Wind Resources for DSO 216, Version 2

Effective: 07/30/10

This Business Practice describes the process and procedures for Customers to request netting of multiple Wind Turbine Generating Facilities. Netting enables an aggregate operational response to BPA Transmission Services directives under Dispatcher Standing Order (DSO) 216 or its successor.

A. Background

- 1. DSO 216 is an operational and reliability protocol designed to maintain load and resource balance within the BPA Control Area. Pursuant to DSO 216, BPA Transmission Services dispatchers provide reliability directives limiting wind generation output to scheduled values when there is insufficient decremental balancing reserves available on a planning basis to offset wind resource over-generation (i.e., over-generation event). Dispatchers also provide reliability directives to curtail wind plant schedules/e-Tags when actual wind generation output is less than the scheduled amount and there are insufficient incremental balancing reserves available on a planning basis to offset the wind resource under-generation (i.e., under-generation event). More information on DSO 216 can be found on BPA's Wind Operations web page: http://www.transmission.bpa.gov/wind/op_controls/
- 2. On behalf of the Netted Resources the Netting Agent¹ or Netting Participant² is responsible for assuring that the aggregate operational response from the Netted Resources satisfy BPA Transmission Services' requirements pursuant to DSO 216. The Netting Agent/Participant³ is, on behalf of the Netted Resources, also responsible for all Failure to Comply (FTC) Penalty Charges related to compliance with dispatch directives under DSO 216 for each Netted Resource⁴.

B. General Eligibility Requirements

1. To qualify as a Netted Resource, a wind Generating Facility must be within the BPA Control Area and meet all of the technical and communication equipment requirements to receive limit to wind signals electronically or through use of BPA's iCRS⁵ Generation Advisor web application.

¹The entity representing Netted Resources that is responsible under an executed Netting Agreement for: (1) the aggregate operational resonse of Netted Resources when Transmission Services issues a directive pursuant to DSO 216 or its successor; and (2) financial settlement of Failure to Comply (FTC) Penalty Charges for a Netted Resource.

²A Transmission Services customer that owns and operates each Netted Resource under the same legal entity and is solely responsible under an executed Netting Agreement for: (1) the aggregate operational response of Netted Resources when Transmission Services issues a directive pursuant to DSO 216 or its successor; and (2) financial setlement of FTC Penalty Charges for Netted Resource.

³An entity that operates a Wind Facility or other Variable Energy Resource within BPA's Balancing Authority Area and that has signed a Supplemental Service Agreement agreeing to supply or purchase Supplemental Services for that Wind Facility.

⁴A wind Generating Facility in the BPA Control Area, the entire output of which is designated in a Netting Agreement by the wind Generating Facility's Netting Agent or Netting Participant. ⁵BPA's Integrated Curtailment and Redispatch System, as implemented through BPA's Generation Advisor web application.

- 2. To be eligible for Netting Agent/Participant status, an entity must sign a Netting Agreement¹ with BPA Transmission Services that designates two or more Netted Wind Resources.
 - a. Netting Agents/Participants must be able to receive DSO 216 information for all Netted Resources electronically or through iCRS.
 - b. Netting Agents/Participants must meet BPA creditworthiness criteria.
 - c. Netting Agents/Participants, on behalf of the Netted Resources, must be responsible for all FTC Penalty Charges for the each Netted Resource designated in the Netting Agreement.

¹An agreement between BPA and a Netting Agent/Participant that gives the Netting Agent/Participant the obligation to ensure an operational response from two or more Netted Resources to Transmission Services dispatch directives under DSO 216 or its successor, and financial settlement of the FTC Penalty Charges related to a Netted Resource's compliance with dispatch directives under DSO 216.

C. Requesting Netting Agent or Netting Participant Status

- 1. The Netting Agent must provide BPA Transmission Services with a letter signed by both the wind Generating Facility (i.e., owner or operator) and the Netting Agent that specifies an agency relationship between the wind Generating Facility and the Netting Agent. The Netting Agent must have actual authority to: (1) control the output of the wind Generating Facility to respond to BPA Transmission Services dispatch directives under DSO 216; and (2) receive and pay FTC Penalty Charges on behalf of the wind Generating Facility. This step does not apply to a Netting Participant.
- 2. The Netting Agent/Participant must submit to BPA Transmission Services the Netting Wind Resources for DSO 216 Request Form (the "Netting Request") so that it is received at least 60 calendar days prior to the first day of the month in which any wind Generating Facility will become a Netted Resource. BPA Transmission Services may waive the 60-day notification requirement on a non-discriminatory basis.
- 3. After receipt of the Netting Request, BPA Transmission Services will tender a Netting Agreement to the Netting Agent/Participant for signature.
- 4. Netting Agreements must have a minimum term length of one year, and a maximum requested term of five years.
- 5. To renew a Netting Agreement, BPA Transmission Services must receive a new Netting Request in accordance with this Business Practice at least 60 calendar days prior to the term end date of the Netting Agreement.

D. Termination of Netting Agreement, Netting Agent or Netting Participant Status

- 1. The Netting Agreement will terminate upon the date: (1) the parties agree to terminate; (2) BPA Transmission Services exercises its unilateral right to terminate the agreement to preserve Transmission System reliability; or (3) a party provides to the other party 60 days advance written notice to terminate the Agreement.
- 2. The Netting Agent/Participant status for an individual Netted Resource may terminate pursuant to the procedures stated in the Adding and Removing Netted Resources from a Netting Agreement below.

E. Adding and Removing Netted Resources from a Netting Agreement

- 1. To add or remove a Netted Resource from Exhibit A of a Netting Agreement, the Netting Agent/Participant must submit a Netting Request, in accordance with Requesting Netting Agent or Netting Participant Status section above, to BPA Transmission Services. If adding a Netted Resource that has not yet reached its "In-Service Date," the Netting Request must specify the Netted Resource's expected In-Service Date.
- 2. If adding a Netted Resource, the new Netted Resource must satisfy the eligibility requirements under General Eligibility Requirements section above.
- 3. If acting as a Netting Agent, the Netting Agent must also provide BPA Transmission Services with a letter meeting the requirements of the Requesting Netting Agent or Netting Participant Status section above. This requirement does not apply to Netting Participants.
- 4. BPA Transmission Services will prepare a revised Exhibit A for Customer¹ signature. Upon execution, BPA Transmission Services will send the Netting Agent/Participant one executed original of the Exhibit revision and retain one executed original for BPA Transmission Services' records.
- 5. An executed Exhibit revision will replace any preexisting Exhibit A to the Netting Agreement.
- 6. The term of the Netting Agreement (i.e., one to five year term) will continue to apply to any revision to Exhibit A.

F. Responsibilities of the Netting Agent or Netting Participant

1. The Netting Agent/Participant, on behalf of the Netted Resources, is responsible for ensuring that Netted Resources provide the net aggregate required operational response to BPA dispatcher directives under DSO 216.

¹Any customer taking service under Use of Facilities (UFT), Formula Power Transmission (FPT), Integration of Resources (IR), Part II or Part III of the OATT.

 The Netting Agent/Participant, on behalf of the Netted Resources, is also responsible for payment of any FTC Penalties associated with Netted Resources and BPA dispatch directives under DSO 216.

G. Assessment of "Strikes"

- Wind Generating Facilities that participate in a Netting Agreement carry into the Netting Agreement any accumulated "strikes" under DSO 216 during the previous 24 months. For example, if a wind Generating Facility received two strikes before entering into a Netting Agreement, the wind Generating Facility will continue to have two strikes after it becomes a Netted Resource in a Netting Agreement.
- 2. Each Netted Resource in a Netting Agreement will receive a DSO 216 "strike" when the Netting Agent fails to provide the net aggregate response required under DSO 216.
- 3. When a Netted Resource accumulates three or more "strikes," BPA Transmission Services may require that the resource install equipment, at the resource's expense, to give BPA Transmission Services the direct ability to limit output of the resource. BPA Transmission Services will notify both the Netting Agent/Participant and the Netted Resource in writing of the requirement to install the equipment and timeline for equipment installation.

H. Generation Imbalance Accounting for Netted Resources

1. This Business Practice does not change the assessment of Generation Imbalance Penalty Charges. Except to the extent provided in an agreement for self-supply of Generation Imbalance reserves, each Netted Resource is responsible for its individual Generation Imbalance account for all applicable imbalance bands. Persistent Deviation Penalties will apply to the output of individual Netted Resources. BPA Transmission Services will not net Generation Imbalance Penalty Charges for a Netting Agent's/Participant's Netted Resources.

I. Limits and Curtailments

1. Under this Business Practice, BPA Transmission Services will treat multiple wind Generating Facilities as a single virtual resource (i.e., as Netted Resources) under the control of a Netting Agent or Netting Participant. During an over-generation event, the Netted Resources' aggregate response must be equivalent to the sum of the response that would be required from each Netted Resource. During an under-generation event, the Netted Resources' aggregate curtailment to e-Tags will be equivalent to the difference between the sum of the schedules of each individual wind resource in the net and the sum of the output of each individual wind resource in the net plus the total reserve allocation for each individual wind resource in the net. The aggregate curtailment will be assessed on a pro rata basis to those individual resources whose e-

Tag schedules are in excess of their individual targets.

J. Contact Information

1. Completed and signed Netting requests, Netting Agreements, and requests for revisions to Exhibit A must be submitted to BPA Transmission Services contact either by:

Overnight Delivery Service	Bonneville Power Administration Transmission TSE-TPP-2 7500 NE 41st St, Suite 130
(physical	Vancouver, WA 98662-7905
delivery: UPS, Fed	Required phone number: (360) 619-6080
Ex, etc.)	The address above should be used if the Interconnection Customer ¹ requests a return receipt.
Email	Email to: <u>TxRequests@bpa.gov</u>
	Enter the Netting Request in the subject line of the email. This email address provides an automated reply indicating that the application was received.
Facsimile (fax)	Faxed Interconnection Requests will be accepted only at (360) 619-6940.
US Postal Service	Bonneville Power Administration Transmission Marketing and Sales - TSE-TPP-2, P.O. Box 61409, Vancouver, WA 98666-1409
	The Interconnection Request transmitted by fax or email should be followed by an executed hard copy of that request to be received by BPA Transmission Services within five Business Days of receipt by BPA Transmission Services of the faxed or emailed request to the above address.

K. Additional Information

Policy Reference

• OATT: Attachment L

Forms

• Netting Wind Resources for DSO 216 Request

 $^{^{1}\}mathrm{A}$ customer who is submitting a Generation Interconnection Request to BPA

• Netting Agreement

Related Business Practices

- Failure to Comply
- Redispatch & Curtailment
- Generation imbalance Service

Version History

Version 2	07/30/10 Version 2 of this Business Practice changes the procedures for initiating or modifying Netting Agreements. This version also removes Section 6.2 as it became redundant when we modified Section 4.2.
Version 1	05/21/10 New business practice. DSO 216 is an operational and reliability protocol designed to maintain load and resource balance within the BPA Control Area. Pursuant to DSO 216, BPA Transmission Services dispatchers provide reliability directives limiting wind generation output to scheduled values when there are insufficient decremental balancing reserves available on a planning basis to offset wind resource over-generation (i.e., over-generation event). Dispatchers also provide reliability directives to curtail wind plant schedules/e-Tags when actual wind generation output is less than the scheduled amount and there are insufficient incremental balancing reserves available on a planning basis to offset the wind resource under-generation (i.e., under-generation event). More information on DSO 216 can be found on BPA's Wind Operations web page: http://www.transmission.bpa.gov/wind/op_controls/ On behalf of the Netted Resources (as defined in section 2 of this Business Practice), the "Netting Agent" or "Netting Participant" (also defined below) is responsible for assuring that the aggregate operational response from the Netted Resources satisfy Transmission Services' requirements pursuant to DSO 216. The Netting Agent/Participant is, on behalf of the Netted Resources, also responsible for all Failure to Comply Penalty¹ Charges related to compliance with dispatch directives under DSO 216 for each Netted Resource.

¹The consequences of non-compliance as defined in the Failure to Comply Business Practice in effect at the time.